

KENTUCKY STATE NATURE PRESERVES COMMISSION

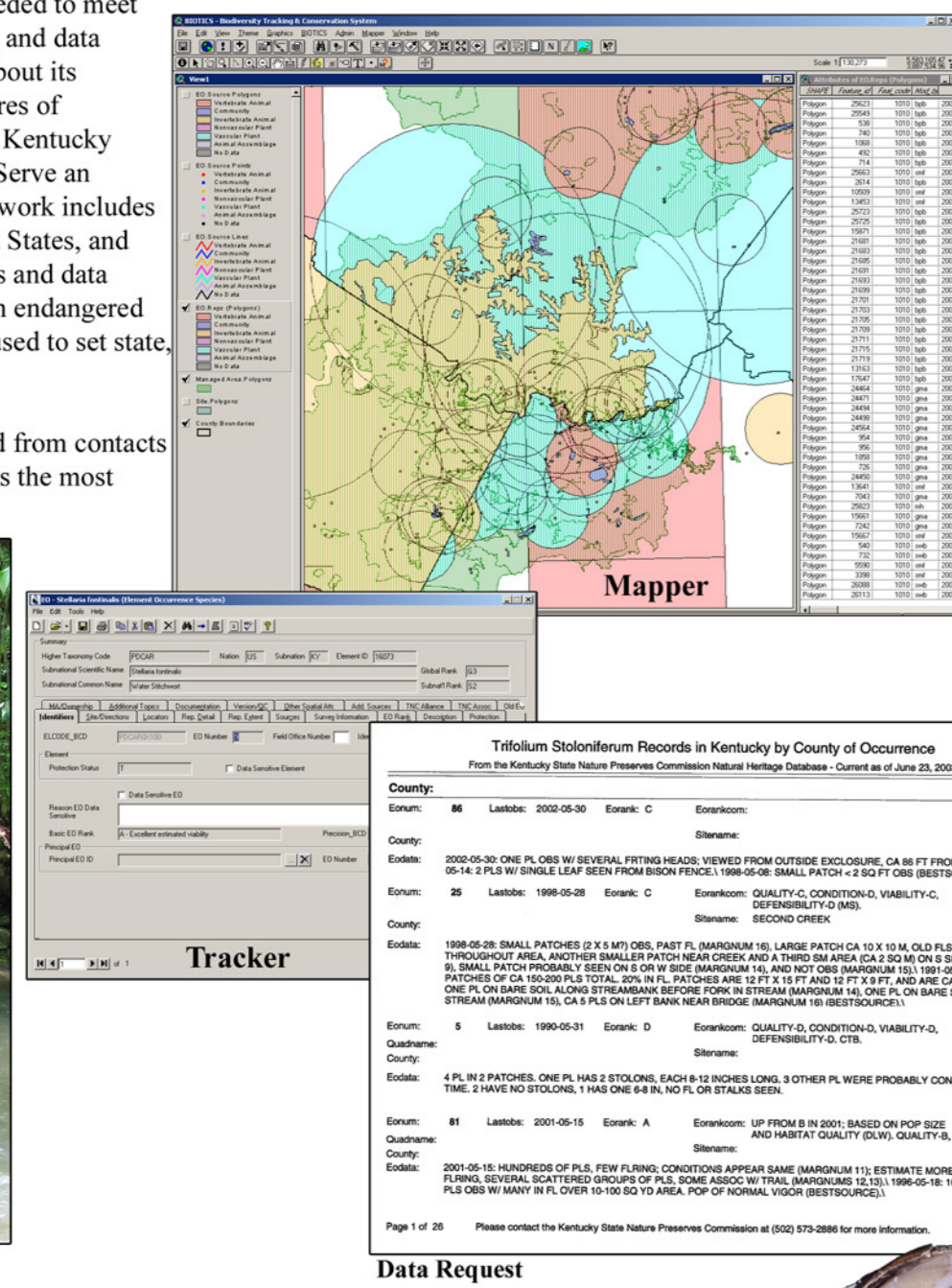
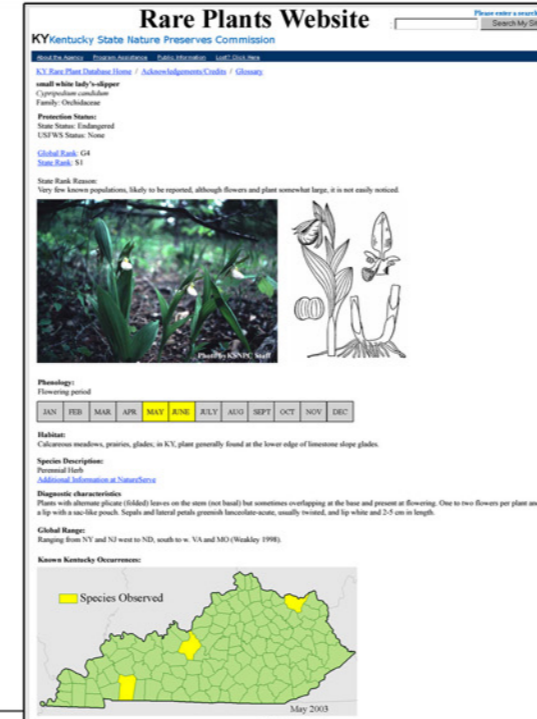
Geographic Information Systems assist KSNPC in meeting its mission to:

Protect Kentucky's natural heritage by (1) identifying, acquiring, and managing natural areas that represent the best known occurrences of rare native species, natural communities, and significant natural features in a statewide nature preserve system; (2) working with others to protect biological diversity; and (3) educating Kentuckians as to the value and purpose of nature preserves and biodiversity conservation.



NA

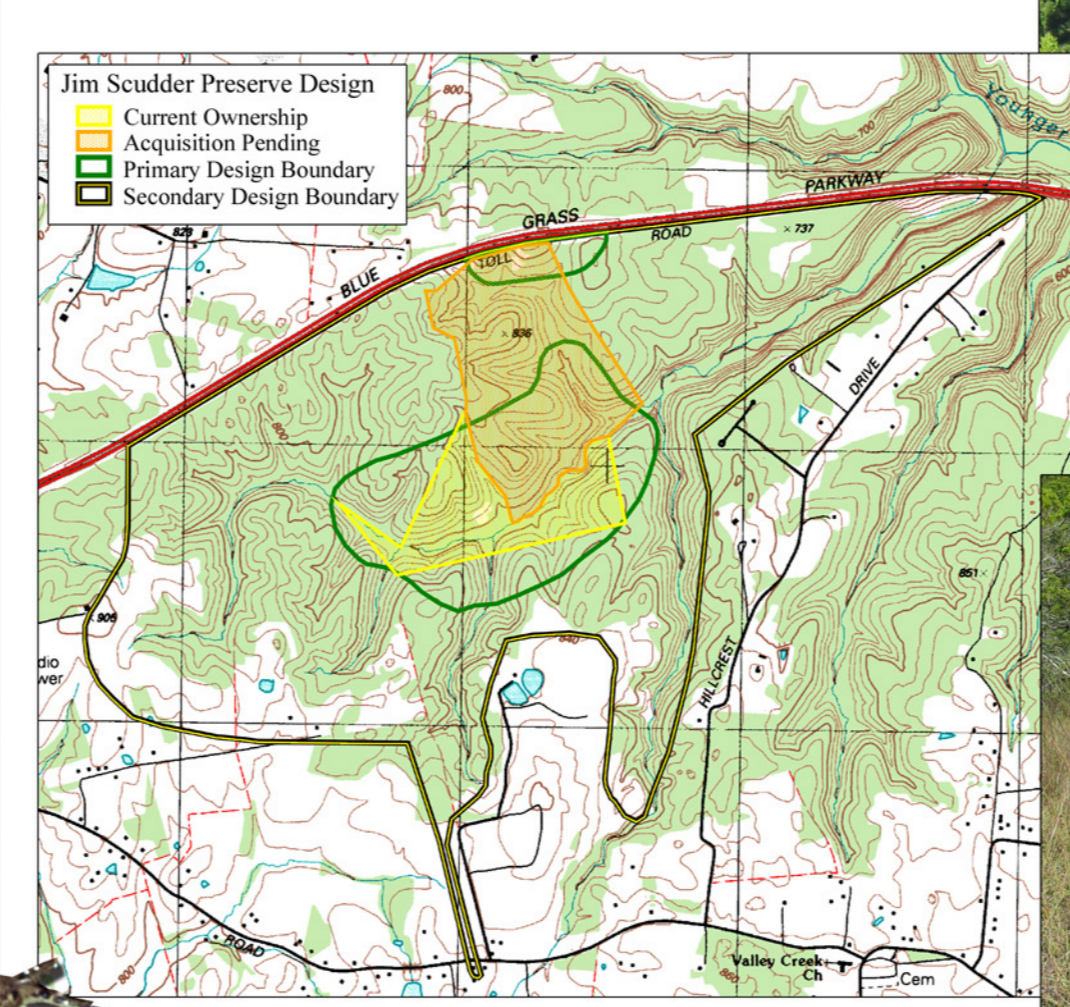
Commission biologists continually gather this information during their field work and from contact with other Kentucky biologists. As a result, the Kentucky Natural Heritage Program is the most complete and current biological database of its kind available.

Kentucky State Nature Preserves Commission
5.1.2003

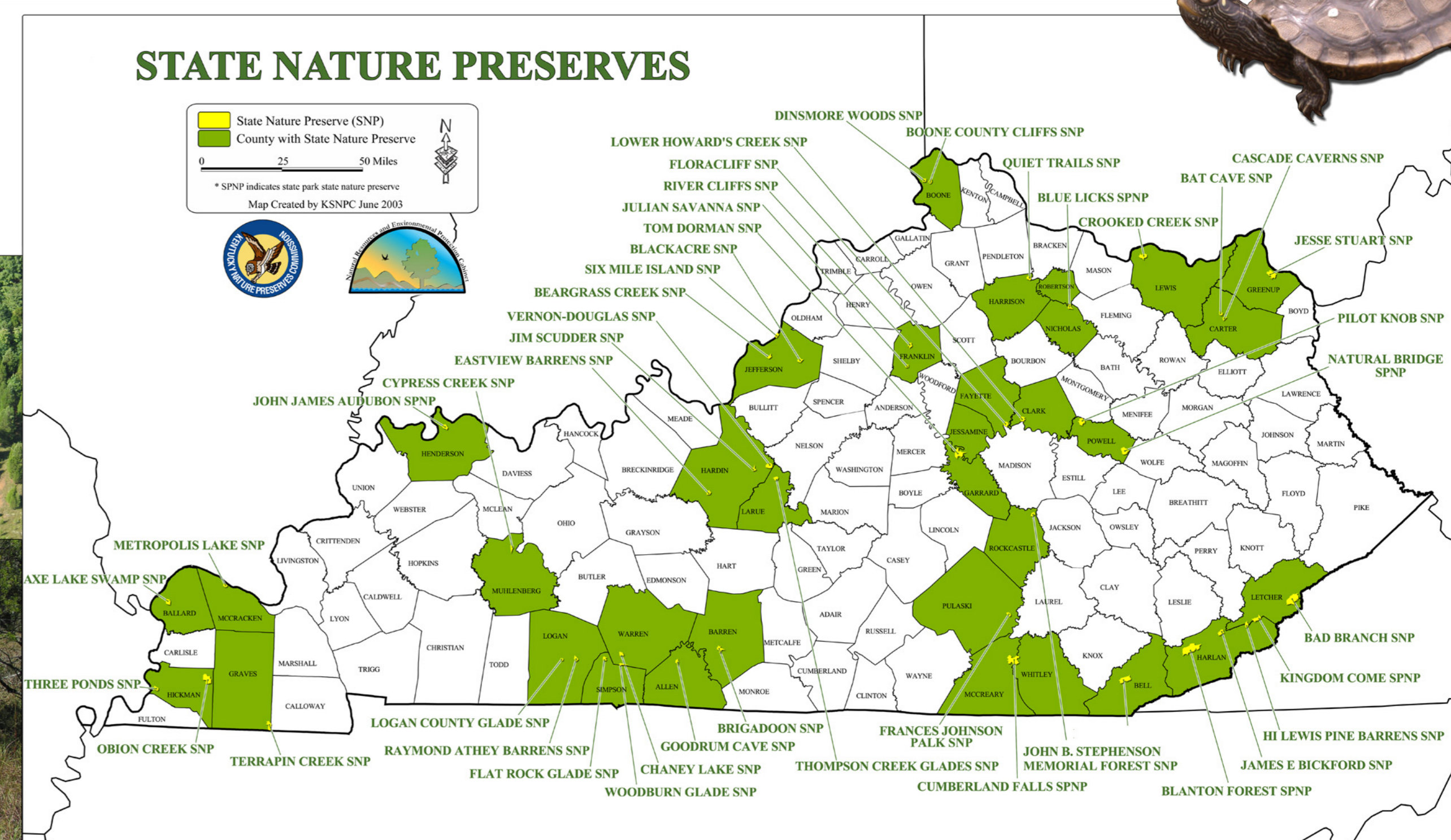
AN ANNOTATED CHECKLIST



Kentucky's natural heritage can best be protected through the cooperative efforts of government agencies, private organizations, and concerned citizens. In every instance, however, land protection by the Commission is accomplished with the full cooperation of landowners. Landowners are offered a variety of choices if they are interested in protecting a qualifying natural area. For example, the Commission can purchase ecologically significant property from willing sellers for inclusion in the nature preserves system. Alternatively, the owner can choose to donate the property to the Commission for less than fair market value, thereby qualifying for a deduction on income taxes. If a landowner wishes to retain ownership of a qualifying natural area, yet be assured that the property will remain in natural condition, legal protection can be obtained in perpetuity by dedicating the land as a state nature preserve or by conveying a conservation easement to the Commission. The terms of the dedication or easement are negotiable with the landowner, so long as permanent and thorough protection is assured.



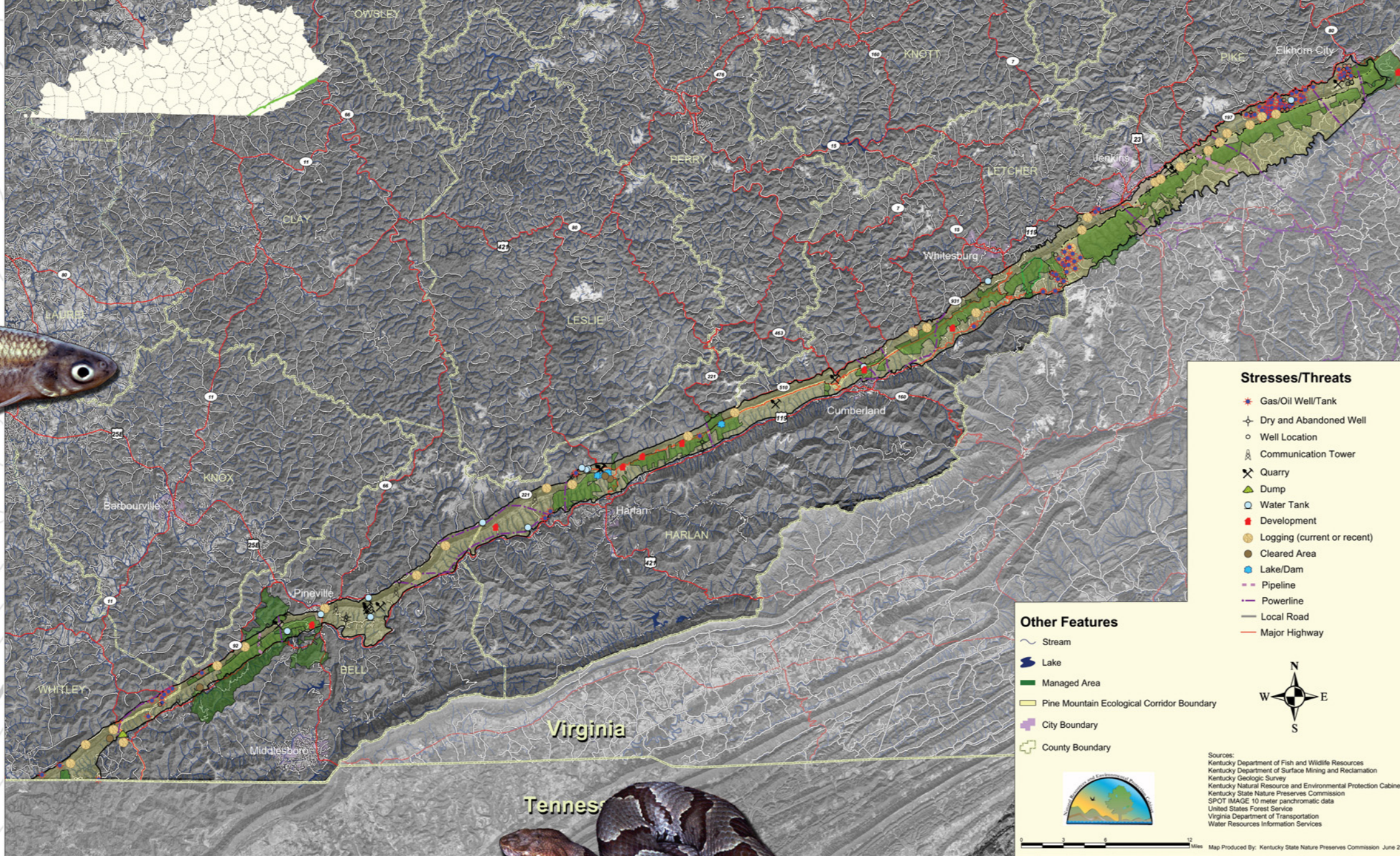
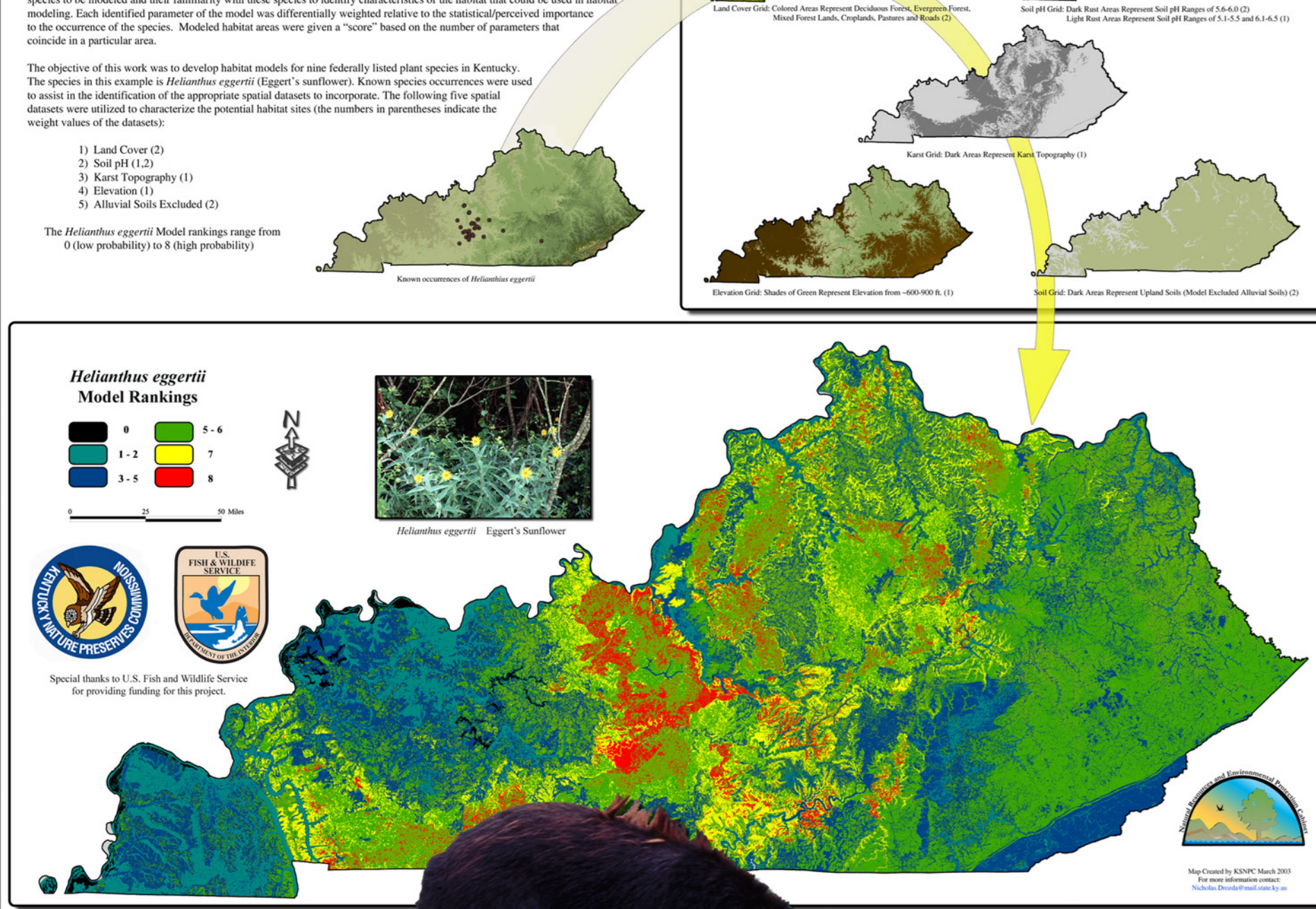
 State Nature Preserve (SNP)



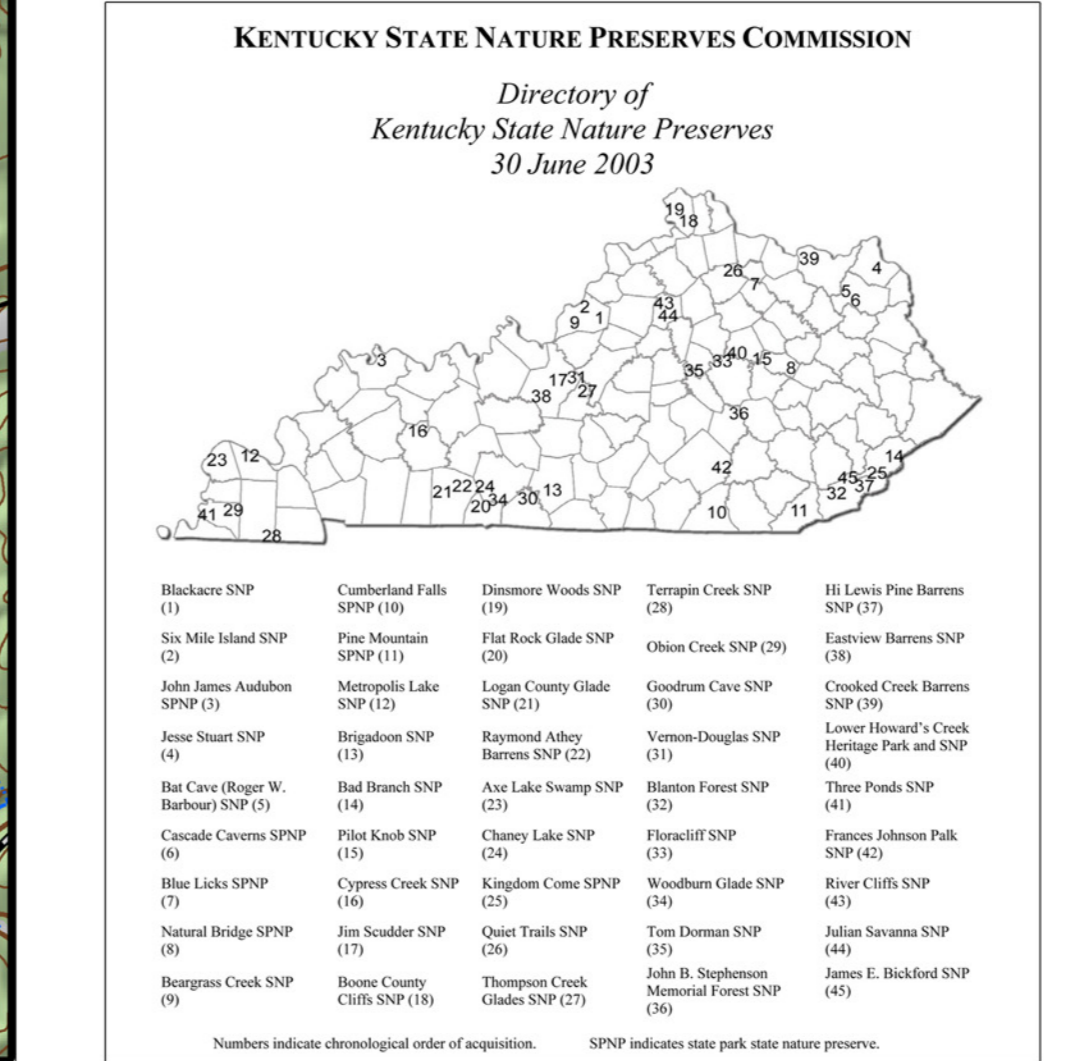
Kentucky State Nature Preserves Commission
Nicholas Dravid, Eric Feunovich, Deborah White and Sara Hines

Habitat prediction modeling efforts use geographic information systems (GIS) to integrate information about the habitat characteristics for a species. Physical, geographic, hydrologic, or ecological parameters are characteristic of the known occurrences of a species are identified and the associated spatial data are incorporated into the model. GIS allows for the integration of these parameters, thus enabling potential habitat to be identified and ranked.

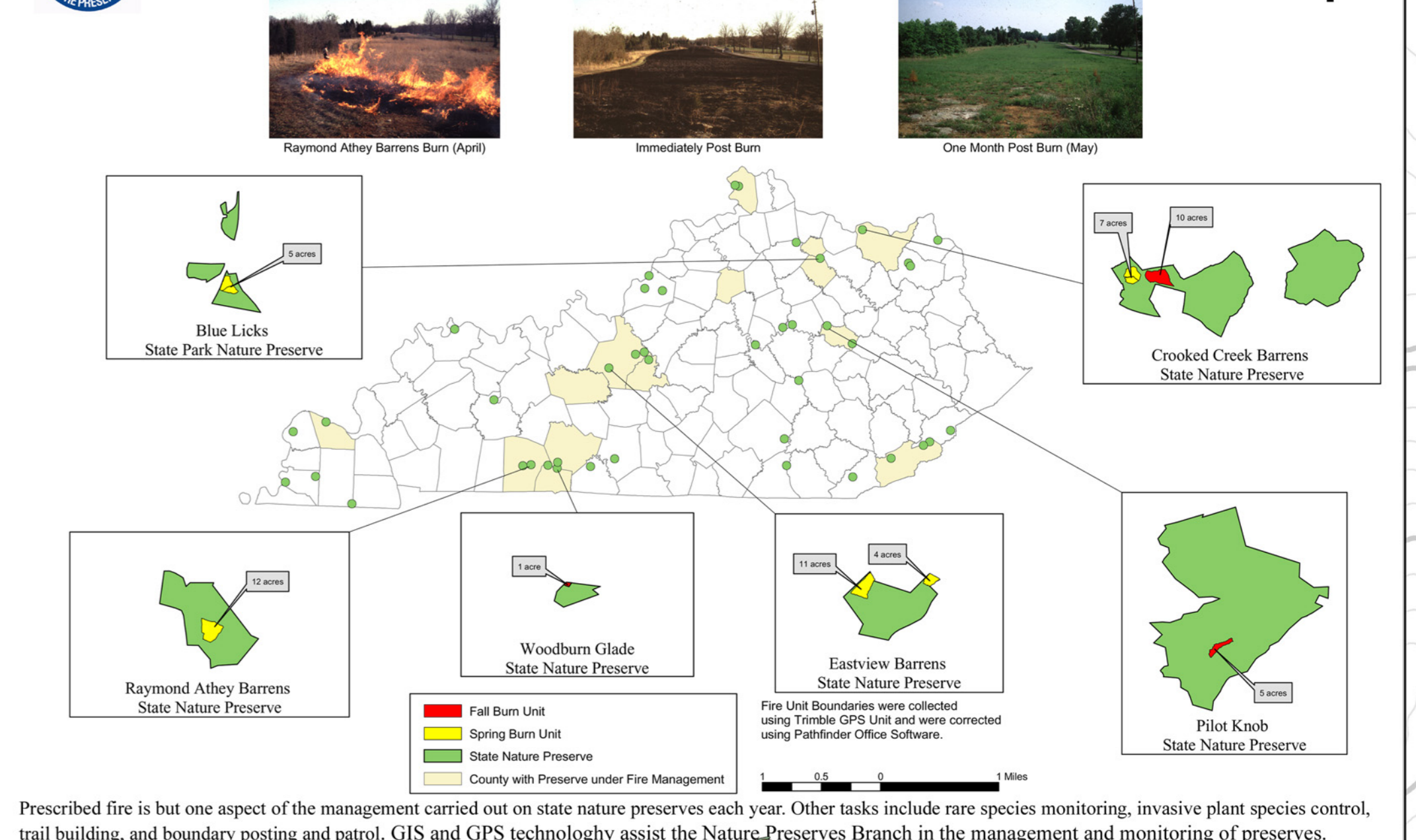
The Kentucky Natural Heritage Database (KNHD), a database maintained by Kentucky State Nature Preserves Commission (KSNPC) on rare species and natural communities, was utilized for this project. The authors used the locations of known occurrences for the species studied and these known habitats to create the model.



Nature preserves protect our natural heritage and showcase a diverse cross section of Kentucky's beauty. People seek out the colorful arrays of spring wildflowers, fair vistas from mountain top vantage points, waterfalls, quiet lakes, stately old growth trees, and challenging trails to find solace from our fast-paced world. Many of the state nature preserves are open to the public sunrise to sunset all year long for passive recreation such as hiking, bird watching, nature study and photography. Please check our directory for a list of those open for public use. Remember that pets, camping and picnicking are not allowed and the preserves are open to foot traffic only.

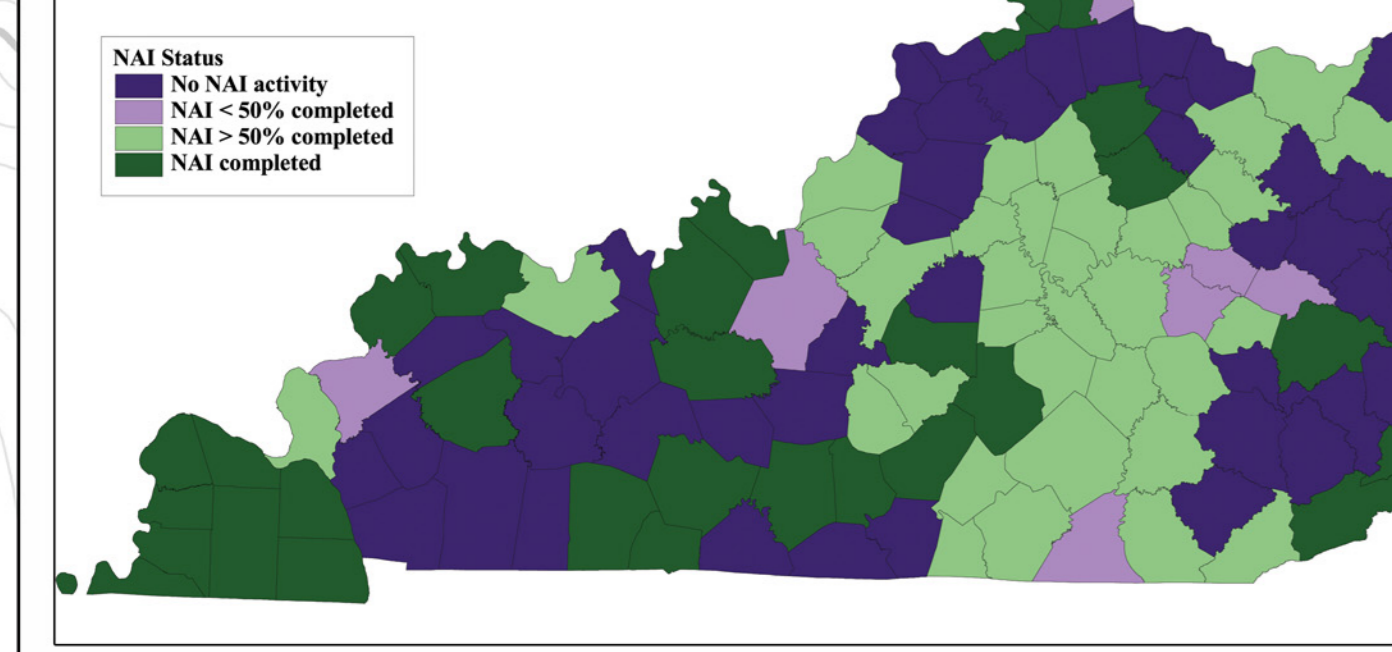


2002 Prescribed Burns

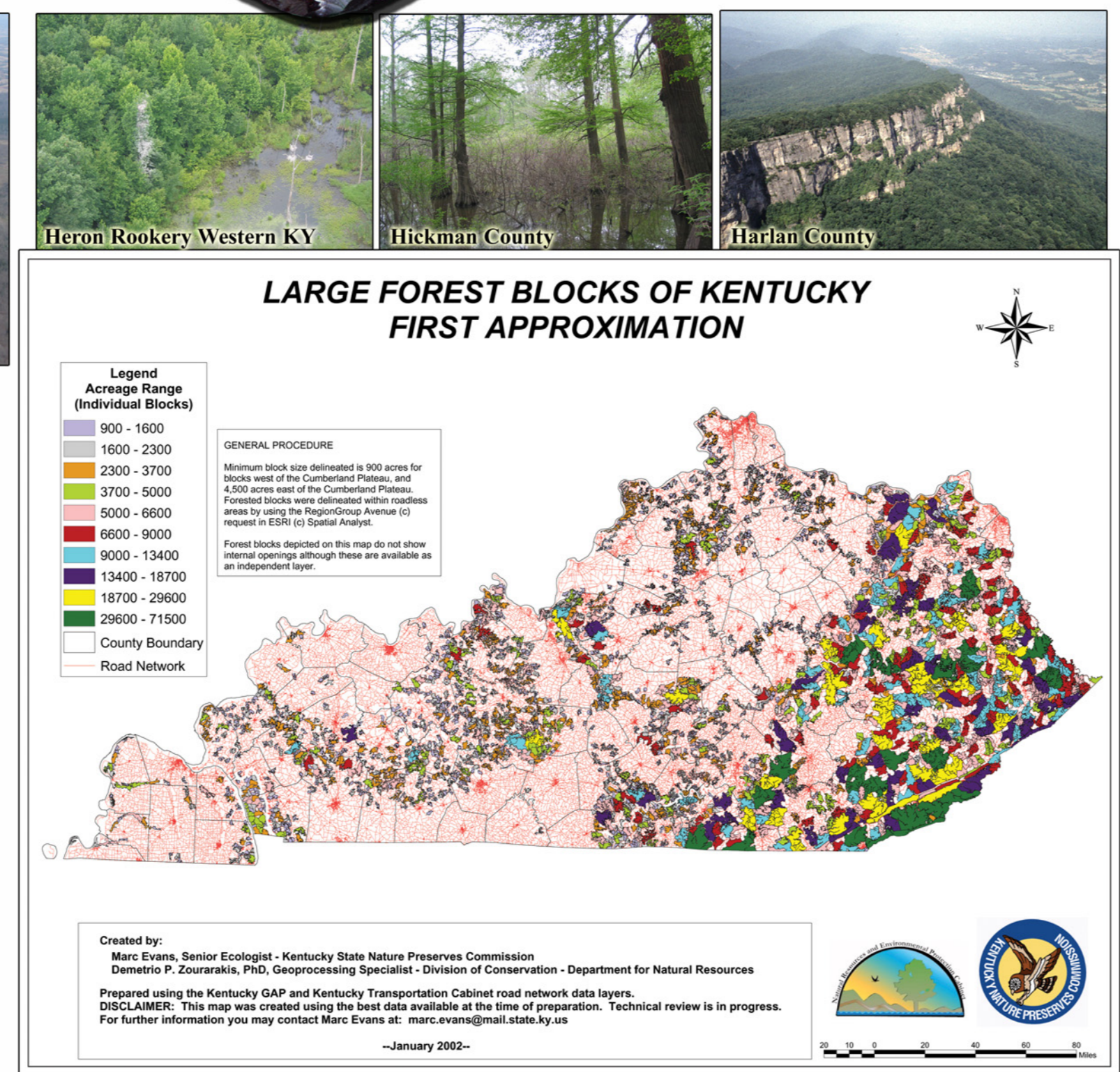


The Kentucky State Nature Preserves Commission is mandated to inventory the state for our highest quality natural areas. A natural area is an area containing an aquatic or terrestrial ecosystem that has

KSNPC ecologists use a process called Natural Areas Inventory (NAI) to locate those few natural areas that remain intact. NAI is done on a county-by-county basis. This procedure begins with interpretation of aerial photos, topographic maps, satellite images, and other data sources. Using this information, sites with the highest potential are then chosen and visited by helicopter to determine whether a ground visit is necessary. After all of the potential natural areas within a county have been checked by air, the highest quality sites are visited on the ground and an inventory of the site is done. The best sites are then targeted for some degree of protection or recognition with permission of the landowner.

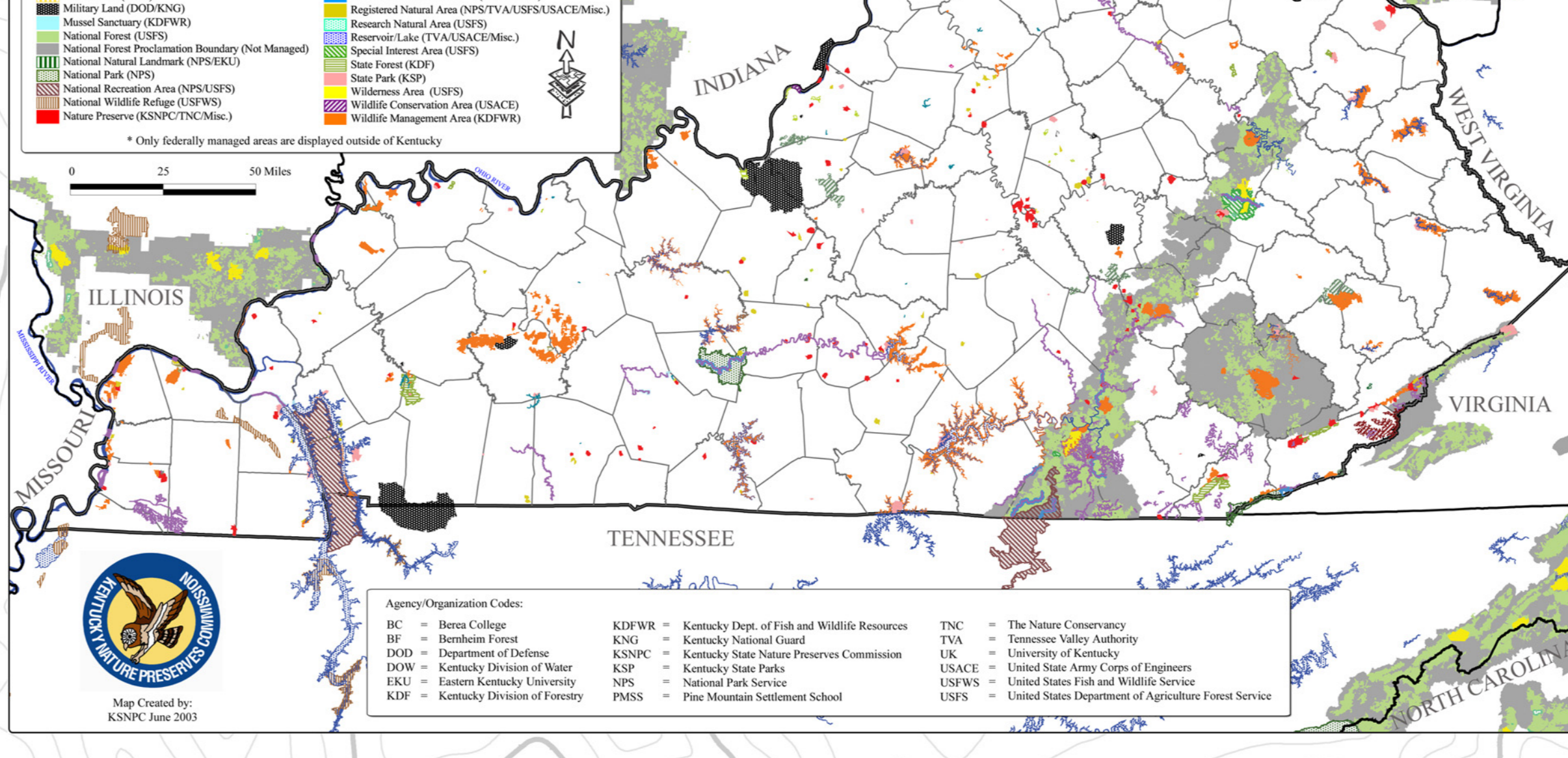


Minimum block size delineated is 900 acres for blocks west of the Cumberland Plateau, and 4,500 acres east of the Cumberland Plateau.



The managed areas are mapped based on a unit type code assigned by the Kentucky State Nature Preserves Commission. The managing agency/organization is listed in parenthesis after the unit type category. Managed areas included on this map range from recognized regional areas to small-scale managed lands. This map presents data compiled as of June 2001. It is a

 County City Park (Misc.)
 County Private University Forest (BOE/EDU/C/Misc.)
 Private Educational Institution (PhEd/Misc.)
 Fishing Lake (KDFW)
 National or State Outstanding Resource Water (DOW)
 National or State Wild River (USFS DOW)
 Historic Site (Misc.)
 Other University Land (U.C.)



Registered Natural Area
County with Registered Natural Area

